

Remarks/Arguments

Claims 12 to 17 are pending, and have been objected to and rejected.

Claims 12 to 17 have been objected to because of the noted informality.

Applicant traverses this objection.

The Office Action stated that, specifically, Claim 12 recites a plurality of process steps without being separated by a line indentation which renders the claim indefinite because it cannot be clearly ascertained when one step ends and another begins. Applicant traverse this statement. The claim is not indefinite on the grounds that the steps are not clear as to when one step ends and another begins. The claim has two steps with each step beginning with an action verb and separated by a comma followed by the conjunction "and." The structure of the claim is:

- Preamble
- "comprising"
- "coating"
- ",and"
- "passing"

Claim 12 is not indefinite.

The lack of line indentations to separate process steps does not make Claim 12 indefinite.

The Office Action stated: that it is noted that where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation; see 37 CFR 1.75(i); and that appropriate

correction is required. Applicant traverses this statement. The claim is not indefinite on the ground that each of the two process steps are not line indented. Line indentation of process steps is not mandatory. 35 U.S.C. 1.76 states, in part:

“(h) The claim or claims must commence on a separate sheet.

(i) Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.”

[Emphasis supplied]

The term “must” means mandatory. The term “should” does not mean mandatory. The lack of line indentations for each process step has not been shown in the record to make Claim 12 indefinite. So no correction of Claim 12 is required or necessary.

This objection should be withdrawn.

Claims 12 to 17 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant traverses this rejection.

The Office Action stated: that, specifically, Claim 12 recites a plurality of process steps without being separated by a line indentation which renders the claim indefinite because it cannot be clearly ascertained when one step ends and another begins; that it is noted that where a claim sets forth a plurality of element or steps, each element or step of the claim should be separated by a line indentation; and see 37 CFR 175(i). Applicant traverses this statement for the

reasons and information set out above under the objection. The lack of line indentation does not automatically make the claim indefinite. The burden of proof is on the Examiner, and the Examiner has not factually shown in the record why Claim 12 is indefinite merely on the ground that non-mandatory line indentations for the process steps have not been used. The Examiner has not carried his burden of proof. Each of the two steps of independent Claim 12 begins with an action verb (i.e., "coating" and "passing," respectively) so the process claims are not indefinite. The end of the first step and the beginning of the second step is clearly delineated.

This rejection should be withdrawn.

Claims 12 to 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Zuser et al. (WO 98/26931) in view of Hill (U.S. Patent No. 3,959, 546). Applicant traverses this rejection.

The Office Action stated that it is noted that the column and line listings for Zuser et al. are from the English translation of the document U.S. Patent No. 6,200,663.

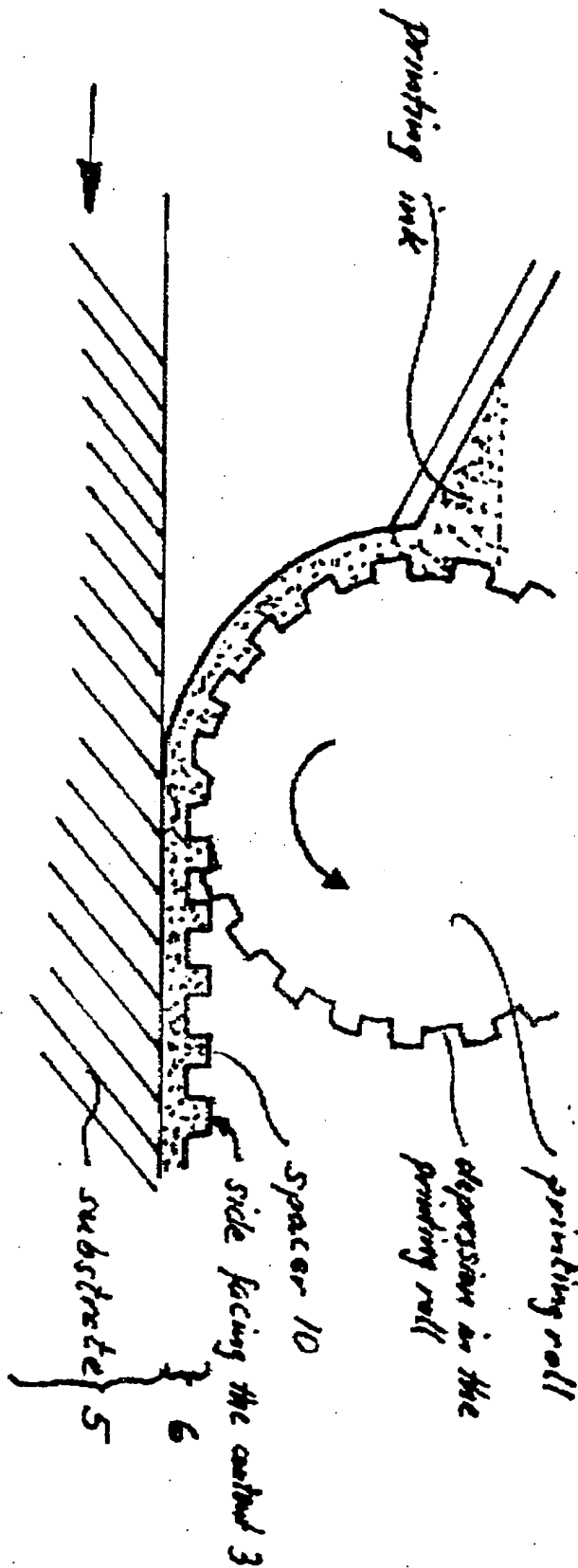
Regarding Claim 12:

Claim 12 involves a process for manufacturing lids for closing off containers using a sealing seam, where the lids contain a substrate material featuring, with respect to a container on which the lids are used, an outward facing printing and an inward facing sealing layer. The substrate material is coated by means of extrusion coating or the coextrusion coating with an extrusion layer or coextrusion layer forming the sealing layer. The coated

substrate material is passed between a pressure roll having a smooth surface and a cooling roll while being put under pressure, whereby the substrate material faces the pressure roll and the extrusion layer of the coextrusion layer faces the cooling roll. The configuration of the surface of the cooling roll transfers to the extrusion layer or the coextrusion layer as a reverse image forming an embossed sealing layer. The surface configuration of the cooling roll is a roughness pattern. The depth of roughness on the surface of the cooling roll is such that said roughness penetrates less than all of the way through the sealing layer.

Zuser et al. is not a very pertinent reference as it only involves printing and does not embossing. The Examiner has referred to Figure 3 of Zuser et al., however the Zuser et al. process/technology to provide the packaging element shown in Zuser et al.'s Figure 3 would involve printing, not embossing. This conclusion is supported by Zuser et al. itself.

The following drawing illustrates applicant's contention of the Zuser et al. process/technology to produce the printing element shown in Zuser et al.'s Figure 3:



Applicant's above drawing and position concerning Zuser et al. is fully supported by Zuser et al. itself. Zuser et al. is WO 98/26931, which is in German. The coating of Zuser et al. is in the form of a superficially rough "Aufdruckes." The translation facilities website www.systranbox.com/systran/box (reached via AOL Research & Learn-Online translation) translates "Aufdruckes" and being "Print." A copy of the printout of such Syntran translation is attached. This information shows that the Examiner's contentions regarding Zuser et al. are in error and factually insupportable.

The Swiss patent counsel, for applicant and who is an employee of the assignee, holds a technical degree. The native language of the Swiss patent counsel is German.

It is the opinion of the Swiss patent counsel that Zuser et al. does not describe a pressure/embossing process, but instead describes a printing process. The reasons for his opinion are as follows:

In the instant matter, a problem regarding the definition of the term appears as the word "Druck" has two different meanings in German: either "pressure" or "print." Therefore, a "Druckwaize" can be the ink transferring roll in a printing process or a roll in a process applying pressure.

Zuser et al. (i.e. WO 98/26931) mentions a term "Aufdruck" on page 2, line 23. The German word "Aufdruck" has the meaning of "print" or "printed image." On page 5, line 1, the term "Druckwalze" appears. Therefore, the only logical translation for "Druckwaize" in Zuser et al. is "printing roll." On page 5, line 6, the term "Druckwaizenobenache" is used. The translation is "printing roll surface."

Following the description of Zuser et al., a printing process is applied. The thickness of the printed layer is 1 to 30 μm . The thickness of the printed layer in the region of the depressions in the printing roll, forming spacers ("Abstandshalter"), is from 4 to 100 μm (page 5, lines 20 to 24).

In Figure 4 of Zuser et al. the spacers are arranged at the "outside" of the lid material. Again on page 5, line 29 and 30, it says "...Druckwaize elne Druckfarbenschicht..." a printing roll adds a printing ink to form the spacers 11, said spacers having a form of half of a circle.

Zuser et al. involves a printing process, not a pressure/embossing process. Applicant's claimed process is not obvious to one ordinarily skilled in the art over Zuser et al. in view of Hill. In fact, Zuser et al. directs away from applicant's claimed process. Hill does not cure the defect of Zuser et al. in the search for applicant's claimed process.

The Office Action stated that Zuser et al. teaches the basic claimed process of making a lid having a roughened sealing layer, comprising: coating a substrate material with a layer to form a sealing (1:10-22 and 2:60-65); and embossing a coating/sealing layer between rolls to form a roughened sealing layer (3:10-18). Applicant traverses this statement as being an incorrect description of the disclosure of Zuser et al. Zuser et al. does not teach or suggest the use of a pressure/embossing process. Instead, Zuser et al. uses a printing process.

Zuser et al. does not disclose a two step process of first coating a substrate with a sealing layer and then embossing the coating/sealing layer

between rolls to form a sealing layer. Instead, at best, Zuser et al. uses a single step using a roller to simultaneously supply and roughen a film. Zuser et al. discloses that it uses a printing roll to apply a sealing layer with simultaneous embossing of said sealing layer to form spacers 8 (i.e., roughness) therefrom. Zuser et al. does not disclose any other preparation process within the scope of its disclosed invention.

The Examiner's attempts to turn Zuser et al. into a two step preparation process has no factual or other support in the record, and would destroy the very core of the disclosed invention of Zuser et al. (which action is forbidden and has no basis or motivation for one ordinarily skilled in the art to do such).

Zuser et al. does not disclose the use of a second roller, let alone, a second roll that is a cold roll. To try to read a second roll in or into the Zuser et al. disclosure is mere speculation. Silence in the disclosure of the Zuser et al. invention is no substitute for the facts required by Section 103(a).

Zuser et al. only discloses the simultaneous coating and printing of the sealing layer using a printing roller (no second roller is ever mentioned). Even when putting a layer of printing ink in spacer form on its outer layer, Zuser et al. only uses an approximately shaped printing roll. No mention is made of a second roller.

Applicant embosses using an embossing cold roll. Zuser et al. does not mention a cold roll. Zuser et al. uses a printing roll. Needless to say, Zuser et al. directs one ordinarily skilled in the art away from applicants' claimed process.

The Office Action stated: that applicant's remarks regarding that the Examiner suggested that Zuser et al. uses a two-step process is incorrect; that, rather, the Examiner only stated that a coating is applied and a sealing layer is embossed; that to clarify this, the Examiner has noted in the above rejection that Zuser et al. is silent with regard to how the coating is initially supplied; and that applicant's arguments incorrectly assumed Zuser et al. "uses a pressure roll to apply a sealing layer," but rather Zuser et al. broadly teaches that the coating having spacers/depressions is produced "with the aid" of a shaped roller. Applicant traverses this statement. Zuser et al. uses a printing process and does not use two separate process steps. The Examiner described the Zuser et al. process as "coating...; and embossing." First, Zuser et al. prints using a printing roll. Second, the Examiner has described two separate steps – separated by "and" – and did not say that the two steps occurred simultaneously. Zuser et al. simultaneously applies and prints (using a printing roll). Also the Examiner is incorrect in asserting that Zuser et al. does not use a shaped printing roll to simultaneously coat and print. The phrase "with the aid" means that the printing roll is used to achieve the simultaneous coating and printing – nothing else is disclosed or suggested in Zuser et al. to achieve either simultaneous step. The Examiner has no basis for trying to ignore the practical meaning of the words within the framework of the Zuser et al. disclosure/invention.

The Office Action stated that Hill is combined with Zuser et al. to show how the coating can be initially applied to the film including forming a texture in the coating with the "aid" of a texture cooling roll. Hill cannot be combined with

Zuser et al., as applicant has shown below. And, besides, it does not matter what Hill teaches since the very core of the Zuser et al. invention is the use of one roll (i.e., a printing roll) to simultaneously affect coating and printing. The single printing roll is that by which such is done.

Column 1, lines 10 to 45, of Zuser et al. describes the prior art and its recited problems that are the very object and purpose that the Zuser et al. invention seeks to overcome. One ordinarily skilled in the art has no reason to combine the Zuser et al. invention with the prior art and its recited disadvantages/problems that the Zuser et al. invention is stated to overcome. To stick the recited prior art into and modify the Zuser et al. invention would destroy the very essence of the Zuser et al. invention. This is forbidden in patent law and has no basis or motivation in the record to do such. Yet that is exactly what the Examiner incorrectly attempted to do while ripping apart the core of the Zuser et al. invention. Zuser et al. discloses using a printing procedure roll to simultaneously apply a sealing coating while printing (roughening). Yet the Examiner threw out the coating function of the simultaneous coating and printing functions of Zuser et al. while reaching into the prior art section of Zuser et al. for a coating step before any printing (note that Zuser et al. does not emboss). The Examiner made this error in his above-recited misdescription of the Zuser et al. preparation process by trying to combine Zuser et al.'s described prior art, i.e., column 1, lines 10 to 22, with Zuser et al.'s invention, i.e., column 3, lines 10 to 18, while decapitating Zuser et al.'s invention by removing the coating function from the use of a printing roll to simultaneously coat and print a sealing layer.

The Examiner has no factual and/or motivational basis for destroying the disclosed Zuser et al. invention in such manner.

Furthermore, the invention of Zuser et al. is the use of one roller to do two simultaneous functions. Hill has to use two rolls. Hill issued in 1976. One ordinarily skilled in the art looking at Zuser et al., later in date (2001) than Hill, is not going to be motivated to revert to the earlier two roll schemes of Hill when the later one roll scheme of Zuser et al. is available. There is no basis of record for the Examiner to destroy the core of the Zuser et al. invention by trying to squeeze the earlier and opposing disclosure of Hill into the Zuser et al. invention. The Examiner has used speculation and hindsight in trying to piece together applicant's claimed invention from prior art references.

The Office Action stated that Zuser et al. does not teach forming an embossed/roughened sealing layer using a textured cooling roll and a pressure/backing roll. That is not all that Zuser et al. does not disclose or suggest. Zuser et al. does not disclose embossing or ~~printing~~ an embossing roll. Zuser et al. does not show a pressure/backing roll. Zuser et al. only discloses a printing roll. It is not described in Zuser et al. as being a backing roll. It is a printing roll that is used to simultaneously coat and print a sealing layer. Zuser et al. does not mention a second roll, let alone a cold second roll. Zuser et al. does not even mention the concept of using a second roll, or a cold second roll. The Examiner has used forbidden hindsight by trying to ignore the express teachings of Zuser et al. while attributing to the disclosure of Zuser et al. that which it does not say in the pursuit of applicant's claimed process.

Hill does not cure the defects in Zuser et al. in the search for applicant's claimed invention.

The Office Action stated that, nonetheless, Hill teaches embossing an extrusion coating using a textured cooling roll and a pressure/backing roll (1:64-2:20 and Fig. 1). Applicant traverses this statement as being an incorrect, and incomplete description of the disclosed process of Hill. The one step process of Hill is the simultaneous coating and embossing of a layer. The disclosure of Hill, like Zuser et al., directs one ordinarily skilled in the art away from applicant's two step process.

Zuser et al. only has one step to simultaneously coat and print; and Hill only has one step to simultaneously coat and emboss. The Examiner has no basis for trying to split the two simultaneous functions of the one-step process of either Zuser et al. or Hill into two steps. To even try to do this would be mere speculation—both rejection references use one-step of simultaneous functions.

The Office Action stated: that applicant's suggestion that it is mere speculation to apply a backing force to Zuser et al. ignores the fact that obviousness rejection is based upon a combination of references wherein the secondary reference provides teaching of a backing roller, if not inherent in Zuser et al.; that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references; and see *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant traverses this statement because it is not even pertinent to what applicant has said. The Examiner's

statement is not even correct in what it says. Applicant has pointed out problems with both rejections and also pointed out why the two rejection references cannot be combined in the search for applicants' claimed invention. The Examiner's statement does not address that which is actually said and done in applicant's comments.

The Office Action stated: that applicant alleges that Zuser et al. does not teach a cold embossing roll; and that, once, again, applicant has ignored the teachings of Hill and has merely attacked the reference individually where the rejection is clearly based upon a combination of references. Applicant traverses this statement as being incorrect. The record speaks for itself and shows that the Examiner's statement as is in error. Applicant has extensively shown why the two rejection references cannot be combined. Applicant has also shown that Zuser et al. shows a printing roll, not an embossing roll.

The Office Action stated: that applicant argument also appear to allege that the combination somehow destroys Zuser et al.; that, however, applicant has again overlooked the teachings of Hill which uses a soft backing roll (element 15) and clearly teaches the "surface forms a replica of the chill roll" which would tend to suggest to a person having ordinary skill in the art that the embossing does not transfer through the film; and that, not to mention, applicant also appears to have overlooked that the Zuser et al. (Fig. 3) suggest an operating pressure, by what ever means used, should not cause an embossment on the print layer or the side opposite the sealing layer. Applicant also transverses this statement as being in error. The invention of Zuser et al. uses a single printing roller to simultaneously

achieve coating and printing. As applicant has already said, to insert the two rolls of Hill into the Zuser et al. invention would destroy its use of a single printing roll, and the advantage thereof. Hill cannot be combined with Zuser et al., as applicant has shown. Zuser et al., by simultaneously coating a sealing material, which is in a semi-fluid form (i.e., non-solidified), and printing the semi-fluid layer does not need a backing roll – it can achieve its goal by its simultaneous coating/embossing. The Examiner's position does not take into account the physical state being acted upon.

Note that Hill describes roll 16 as being a steel backing roll, not a steel pressure/backing roll.

Hill runs paper through a nip formed by textured chill roll 14 and rubber roll 15. Resin is introduced into the nip on the side of the paper facing textured chill roll 14. Figure 1, cited by the Examiner, shows that the instance the resin is introduced into the nip, it contacts the paper and the surface of the texturized chill roll 14, so it simultaneously is being roughened by filling in the textured surface with the instantaneous pressure applied by the nip, i.e., existing in the nip. Hill does have a backing roll 16 but such backing roll does not form a nip with its texturized chill roll 14. Hill's paper (substrate) and/or resin does not contact in any way with its pressure/backing roll 16, which is the opposite of Zuser et al. (and besides Zuser et al. uses a printing roll).

The Office Action stated: that applicant alleges that Hill does not teach a backing roll which does not form a nip with the cold textured roll; that this allegation presumes stupidity upon a person having ordinary skill in the art that

such skilled artisan would be unable to comprehend that because Hill teaches a “backing roll” and a “rubber roll” that the “rubber roll” would not apply pressure to the nip against the textured roll; and that it is maintained that a person having ordinary skill in the art would recognize any roll forming a nip with a textured roll as a roll which applies backing pressure for the embossing process. Applicant traverses this statement. The Examiner does not know what would or would not be within the comprehension of one ordinarily skilled in the art as the Examiner has not factually established in the record the level of skill of one ordinarily skilled in the art. [Note also that by not having factually established such level of skill in the record, this Section 103(a) rejection is defective because such determination is required by Section 103(a), the Graham decision and the MPEP before any determination of obviousness can be made.] Applicant said “pressure/backing roll 16” and “instantaneous pressure applied by the nip” – the Examiner’s statement is in error as it asserts that which applicant did not say.

The Office Action stated that, essentially, Hill suggests that a single station bay be used to cool, emboss, and unite a substrate with a coating layer. Applicant traverse this statement as being an unjustified attempt to generify the specific disclosure of Hill. Section 103(a) requires facts. Also, where does Hill essentially suggest that any of its disclosure can be generified? Hill is limited to a one-step process of simultaneously coating and embossing a layer using a textured chill roll opposed by a rubber roll behind which is a steel backing roll. No where does Hill suggest that any function can be removed from his one-step process.

The Office Action stated that Zuser et al. and Hill are combinable because they are concerned with a similar technical difficulty, namely, forming a texture upon a coated layer in a continuous process. Applicant traverses this statement. Just because two references are combinable is meaningless under Section 103(a). (This type of naked statement of combinability has been condemned by the patent court.) There must be some suggestion or motivation in the prior art that causes one ordinarily skilled in the art in the search for applicant's claimed invention to combine the prior art references, and in a manner that results in applicant's claimed invention. Applicant's disclosure cannot supply the necessary suggestion or motivation. Furthermore, the Examiner has no factual basis for trying to generify the two specific separate problems of the two rejection references into a single, broad, overlying problem

Hill and Zuser et al. are not combinable.

The Office Action stated: that applicant argues that the rejection does not provide a motivation statement because the rejection stated that "Hill and Zuser et al. are combinable because..."; that this is not found persuasive because applicant has apparently ignored the phrase in the last sentence of the second paragraph containing the word "motivated"; that, furthermore, it is noted that for references to be properly combined the references must be analogous art [see MPEP §2141.01(a)]; and that the rejection addresses this important criteria by stating that the references are both "concerned with a similar technical difficulty...". Applicants traverse this statement. Motivation is established by facts in the record, not by the Examiner asserting "analogous art" and assuming

concerns of similar technical difficulty. The burden of proof is on the Examiner. There must be some suggestion to make the combination in the prior art or in the knowledge generally available to one ordinarily skilled in the art. In re Jones, 21 USPQ2d 1941, 1943-1944 (C.A.F.C. 1992). The Examiner has not established the level of skill of one ordinarily skilled in the art.

The Examiner has not factually established a prima facie showing of obviousness in the record.

Throughout the Office Action the Examiner has ignored specific teachings of the two rejection references, tried to generify without factual support and justification, and has not fulfilled the requirements of prior art suggestion or motivation.

The Office Action stated that, at the time of invention, a person having ordinary skill in the art would have found it obvious to have embossed an extrusion coating using a textured cooling roll and a pressure/backing roll, as taught by Hill, in the process of Zuser et al., and would have been motivated to do so in order to gain an economic benefit of removing a separate embossing station. Applicant traverses this statement. Hill and Zuser et al. are not combinable. Hill uses a textured chill roll, whereas Zuser et al. uses a printing roll. There is no motivation of record to put Hill's textured chill roll in Zuser et al. and throw out Zuser et al.'s printing roll. Zuser et al. only discloses the use of one roll, whereas Hill uses the two opposed rolls with a further non-contacting backing roll. The two systems are not the same and there is no teaching that one can be used in place of the other.

Hill states a backing roll, not a pressure/backing roll.

The Office Action stated that it is further noted that it is well established that “economic benefit” is grounds for proper motivation and that motivation does not have to be present in the applied references themselves, but may come from common knowledge generally available in the art. Regarding the Examiner’s assertion re “economic benefit,” if such is “well established,” then put the decisions that say so in the record. There is economic benefit in using one roll as in Zuser et al. as opposed to the three rolls of Hill, so the concept of economic benefit directs away from combining Hill with Zuser et al.

The Office Action states: that it is noted that Zuser et al. provides a smooth print layer (Fig. 3, element 2) opposite the embossed sealing layer; and that it is submitted that it is well within the skill of an ordinary artisan to have used a smooth pressure/backing roll since Zuser et al. clearly teaches away from damaging the print layer (1:38-45). Applicant traverses this statement. Zuser et al. used a single printing roll to simultaneously coat and print. Zuser et al. does not use any backing roll and thereby avoids pressure on the back of the moving web. The Examiner’s incorrect position is contrary to the Zuser et al. disclosure.

The Office Action stated that, furthermore, it is inherent that the textured cooling roll contacting the sealing layer of Zuser et al. does not penetrate through the sealing layer as evidenced by Figure 3. Applicant traverses this statement. First, Hill does not have any Figure 3. In Zuser et al., no backing roll is used in conjunction with the forming process so the Examiner’s statement re “inherent” is speculation without factual support.

Claim 12 requires that the depth of the roughness of the roughness pattern of the surface configuration of the cooling roll is such that said roughness does not penetrate through the sealing layer. This feature is an essential feature of applicant's claimed invention. The substrate material on its free side must be smooth and not be embossed or having any roughness from the embossing process. To get to that result, the roughness of the roll must not penetrate into the rest of the lid.

Zuser et al.'s invention involves the simultaneous coating and printing of a layer. Hill's invention involves the simultaneous coating and embossing of a layer. There is no required motivation or suggestion that would cause one skilled in the art to destroy the very core of the Zuser et al. invention or the Hill invention by destroying the simultaneous coating and printing of the first or the simultaneous coating and embossing of the second by separating either of such into two functions. In fact, the Examiner has agreed by saying that one ordinarily skilled in the art would be motivated to remove a separate embossing station.

Applicant's claimed invention involves separate steps of coating and printing.

This rejection should be withdrawn.

Regarding Claims 13 to 16:

The Office Action stated that Zuser et al. teaches a coating roughness of 1 to 1000 um (1:50-54). Claim 12 is not obvious, so none of the dependent claims are obvious.

Claim 17 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Zuser et al. (WO 98/26931) in view of Hill (U.S. Pat. 3,959,546) as applied to Claims 12 to 16 above, and further in view of Beer et al. (EP 0514803 A1). Applicant traverses this rejection.

The Office Action stated that Zuser et al. does not teach a polyethylene sealing layer; that, nonetheless, Beer et al. teaches an extruded or coextruded polyolefin sealing layer (2:45-53 and Fig. 1, element 8); that it is noted that the term polyolefin is commonly known in the molding art to mean polyethylene, polypropylene, or the like; that Zuser et al. and Beer et al. are combinable because they are from the same field of endeavor, namely, packing foils/lids; and that at the time of invention a person having ordinary skill in the art would have found it obvious to gain an economic benefit of using low cost material. Applicant traverses this statement. Claim 12 is not obvious so dependent Claim 17 is also not obvious.

This rejection should be withdrawn.

Reconsideration, reexamination, and allowance of the claims are requested.

Respectfully submitted,

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Date

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